

BENCHMARK TESTING OF ZR FOR CENDL-3

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In the present paper the validation of zirconium evaluation from CENDL-3 were reported. Neutron leakage spectra experiment from 61-cm zirconium pile and HEU-COMP-INTER-001 criticality experiment were considered. Calculation results obtained with MCNP from CENDL-3, CENDL-2, BROND-2, ENDF/B-VI.2, JENDL-3.2 and JENDL-3.3 were compared. Underestimation of discrete inelastic scattering was observed. Slightly overestimate for (n, 2n) DDX and continuum inelastic cross section was also found in the calculated results based on natural zirconium of CENDL-3.